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## LETTER PROGRESS REPORT FOR PERIOD ENDING 28 FEBRUARY 1985

(NASA-CR-171426) NEW ATMOSPHERIC SENSOR ANALYSIS STUDY Progress Report for period ending 28 Feb. 1985 (New Technology, Inc.) 4 p HC A02/MF A01 CSCL 14B N85-23069

Unclas G3/35 15206

NEW ATMOSPHERIC SENSOR ANALYSIS STUDY

Contract NAS8-36179

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Prepared for:
National Aeronautics and Space Administration
George C. Marshall Space Flight Center
Marshall Space Flight Center, Alabama 35812

This report provides a summary of the tasks performed on Contract NAS8-36179 for the Atmospheric Sciences Division (ASD) of the System Dynamics Laboratory of the Marshall Space Flight Center (MSFC).

#### 1.1 DATA BASE MANAGEMENT SYSTEM

The current revision of the Perkin-Elmer Operating System OS/32 MT 7.2.1 was installed on the Atmospheric Modeling and Simulation System (AMASS) during February. This software appears to offer a means of distributing disc storage among the user community in a more optimal manner than previously available using the file manager.

#### 1.2 NCAR GRAPHICS MODIFICATION

An updated NCAR software package was obtained from Drexel University. It is currently being added to the system for checkout purposes.

#### 1.3 APPLE III WORKSTATION

No change

#### 1.4 DOPPLER RADAR/LIDAR

Next Generation Weather Radar (NEXRAD) software has been received from the National Severe Storms Laboratory (NSSL) and has been loaded onto the Perkin-Elmer. Extensive modifications will be required to permit the software to be compatible with the new operating system.

A NEXRAD Symposium is scheduled April 1-3 at the University of Oklahoma. Among the topics to be discussed are modeling, algorithm and hardware enhancements, as well as communication requirements.

#### 1.5 IMAGE PROCESSING

Various filters developed for the Man-Computer Interactive Data Access System (McIDAS) are being evaluated using sounding (water vapor) data.

#### 1.6 PROTOTYPE DEVELOPMENT

No change

#### 1.7 HARDWARE OPTIMIZATION

The MPS upgrade (with 1 APU) is in the MSFC procurement cycle. Anticipated delivery date is April 15. The 7.2.1 operating system is geared to support this hardware. Approximately one month has been allowed for software checkout prior to installation of the MPS hardware.

### 1.8 UNIX/OTHER LANGUAGES

No change

### 1.9 HIGH-SPEED RJE LINK

No change

### 1.10 IBM 4341 Conversion

No change

### 1.11 CLASS 6/LAN

No change

# 1.12 MAMS REQUIREMENTS

No change

### 1.13 LIGHTNING DISPLAY PACKAGE

No change

# 1.14 GOES IMAGE MACROS

No change

### 1.15 TIROS, VAX, SMMR SOFTWARE

No change

NEW ATMOSPHERIC SENSOR ANALYSIS STUDY

	1984 DEC	1984 1985 DEC JAN	FEB	MAR	APR	MAY	JUN JUL	JUL	AUG	SEP	DCT	NOV
PLAN 2.2		9.9	9.9	9.9 9.9	9.9	9.9	9.9 9.9 9.9 9.9	9.9	9.9	9.9 9.9 9.9	9.9	9.9
2.4		2.4 6.75	5.4									
4.4		4.4 11.0	17.6 24.2		30.8	37.4	44.0	30.8 37.4 44.0 50.6 57.2 63.8 70.4 77.0	57.2	63.8	70.4	77.0
2.4		2.4 9.15	14.6									